IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF TEXAS
WACO DIVISION

CUTTING EDGE VISION, LLC Plaintiff, v. TCL TECHNOLOGY GROUP CORPORATION, TCL ELECTRONICS HOLDINGS LIMITED, TCL COMMUNICATION TECHNOLOGY HOLDINGS LIMITED, and TCL COMMUNICATION LIMITED Defendants.	Case No. 6:22-CV-00285-ADA-DTG JURY TRIAL DEMANDED

PLAINTIFF'S RESPONSE IN OPPOSITION TO DEFENDANTS' MOTION FOR JUDGMENT ON THE PLEADINGS THAT THE ASSERTED CLAIMS OF THE PATENTS-IN-SUIT ARE INVALID UNDER 35 U.S.C. § 101

TABLE OF CONTENTS

TABLE OF AUTHORITIES

Cases

Cases

PLAINTIFF'S LIST OF EXHIBITS

1. **Exhibit A:** Plaintiff Cutting Edge Vision's Statement of Material Facts from the Public Record.

2. **Exhibit B**: Declaration of Justin J. Lesko Dated April 27, 2023.

3. **Exhibit C:** U.S. Patent No. 10,063,761 ("'761 Patent"), Plaintiff's Exhibit 4.

4. **Exhibit D**: U.S. Patent No. 11,153,472 ("'472 Patent"), Plaintiff's Exhibit 4A.

5. **Exhibit E**: Portions of the File History of U.S. Patent No. 10,063,761 ("'761 F.H.").

6. **Exhibit F**: Portions of the File History of U.S. Patent No. 11,153,472 ("'472 F.H.").

7. **Exhibit G**: Portions of the File History of U.S. Patent No. 9,936,116 ("'116 F.H.").

I. Introduction

TCL asks this Court to rule that U.S Patent Nos. 10,063,761 and 11,153,472 ("CEV's patents") are invalid under 35 U.S.C. § 101 for being no more than an "abstract idea." Its motion ignores relevant claim language—and the specification and prosecution history entirely—and rehashes arguments TCL lost at claim construction. TCL's motion should be denied.

Patents issued by the United States Patent Office are presumed valid, and the clear and convincing evidentiary standard applies to all validity challenges, including under § 101. *See Cellspin Soft, Inc. v. Fitbit, Inc.*, 927 F.3d 1306, 1319 (Fed. Cir. 2019). Moreover, the question of eligibility may be determined at the pleadings stage "only when there are no factual allegations that, *taken as true*, prevent resolving the eligibility question as a matter of law." *Aatrix Software, Inc. v. Green Shades Software, Inc.*, 882 F.3d 1121, 1125 (Fed. Cir. 2018). In this regard, while it is a question of law whether a claim recites patent eligible subject matter, the question may involve underlying facts that overlap with other fact-intensive inquiries like novelty under § 102. *Mayo Collaborative Servs. v. Prometheus Labs., Inc*., 566 U.S. 66, 90 (2012).

For these reasons, this Court has explained that "resolving § 101 eligibility of all asserted claims almost certainly requires fact discovery," and that "a court stands a better chance of making the correct § 101 eligibility decision by delaying that decision in order to spend more time understanding the patents and its nuances, as well as technology in general, and what was 'well-understood, routine, and conventional activities previously known to the industry.'" *Slyce Acquisition Inc. v. Syte-Visual Conception Ltd.*, No. 6:19-cv-257-ADA, 2020 WL 278481, at *5, *7 (W.D. Tex. Jan. 10, 2020) (citations omitted). The Court also explained that "because claim construction can affect—and perhaps, in most cases, will affect—a court's § 101 eligibility analysis, the Court believes that it is generally wiser—and more efficient—to wait to determine a

patent's § 101 eligibility until after issuing its claim construction order." *Id*. at *5.

The purpose of the Court's admonitions in *Slyce Acquisition* is for the parties to learn from the *Markman* (and discovery) process. While TCL waited to file its Rule 12(c) motion until after claim construction, it recycles many of the same positions that were at the very least shown to be contested during the claim construction process, including some that the Court's Preliminary Claim Construction Order expressly (or inherently) rejected. Having learned nothing, TCL again makes the same claim construction errors, but this time in a Rule 12(c) context that precludes contesting the facts underlying the § 101 analysis.

First, to support its arguments under *both* Alice Part 1 *and* Alice Part 2, TCL repeats the "purely functional" arguments it made during claim construction. For example, TCL asserts that CEV's claims "only recite high level functional results" (p. 7), use only "result-focused, functional language" (p. 8), "are purely functional and abstract" (p.8), recite "functions in general terms" (p.8), and describe "the communication . . . in purely functional terms" (p. 11). However, the parties devoted significant parts of their claim construction briefs and expert reports to TCL's then-contested "purely functional" assertions. Section III, below, shows that TCL's "purely functional" assertions again ignore important parts of the claims, the specification, and the prosecution history. TCL's arguments are even less compelling here, because: (1) the court rejected TCL's assertion that the element (f) is "purely functional" during claim construction, and (2) at minimum, those assertions are contested, and in the Rule 12(c) context, those facts (and the record) must be viewed most favorably to CEV.

Second, TCL grounds its argument under *both* Alice Part 1 *and* Alice Part 2, on an oft-repeated assertion (made at least twelve times) that CEV's claims are "not inventive." *See*, *e.g.*, p. 7 ("do not focus on an improvement" and "do not solve any technological problem"), p. 11 ("do

not improve in any way existing technology" and "do not disclose any new way to transmit pictures"), p. 12 ("do not recite any inventive concept" and only recite "what one would expect." However, TCL's assertions are unambiguously contradicted by critical parts of the prosecution history showing that CEV repeatedly and thoroughly addressed such "novelty" issues, proving to the examiner that its claims were indeed "inventive."[1]

Third, TCL's legal analysis is fundamentally flawed, as it seeks to have the "exceptions to § 101 swallow the rule" by overgeneralizing and oversimplifying CEV's claims, and also characterizing them at a high level of abstraction that is untethered from the specific requirements of the claims. *See Enfish, LLC v. Microsoft Corp.,* 822 F.3d 1327, 1337 (Fed. Cir. 2016); *McRO, Inc. v. Bandai Namco Games America, Inc*., 837 F.3d 1299, 1313 (Fed. Cir. 2016) (citations omitted, explaining that courts "'must be careful to avoid oversimplifying the claims' by looking at them generally and failing to account for the specific requirements of the claims"). Specifically, as it did during claim construction, TCL again ignores many of the structures, operations, requirements, and features of CEV's claims, particularly in element (f).[2]

CEV establishes below within the framework of a proper § 101 analysis, that when the claims are considered in their entirety in light of the specification[3] and prosecution history, it is clear that they are not directed to an abstract idea but, instead, define specific, unconventional technical improvements that amount to an inventive concept not found in the prior art. To assist

[1] TCL was clearly aware of the importance of the prosecution history to these issues because many of the same parts were addressed during claim construction. Inexplicably, here TCL never once addresses any part of the prosecution history.

[2] Moreover, TCL completely abdicates its responsibility to prove the dependent claims invalid under § 101. It presents no analysis whatsoever of the dependent claims (see pp. 4 and 10), and simply hand waves with a conclusory assertion of invalidity.

[3] The portions of the '472 Patent specification cited herein are also found in the '761 Patent specification.

the Court, CEV has submitted with this Memorandum a separate "Statement of Material Facts from the Public Record" ("CEV's SOF"). The facts in CEV's SOF are compiled from CEV's First Amended Complaint (Dkt. #55), CEV's patents, and the prosecution histories of CEV's patents and a related U.S. Patent No. 9,936,116. All those sources are properly relied upon as part of the public record in considering TCL's Motion.[4]

II. The Patent Specification and Prosecution Histories Demonstrate that the Claims are Directed to Important Technical Improvements, not Abstract Ideas

At the time of the inventions, camera-enabled cellular devices (e.g, cell phones) had limited local storage capacity for pictures. Due to those limitations, technology emerged to upload pictures from the local storage to remote storage sites that do not have those memory constraints.

However, many cellular plans charged fees in certain periods that would apply to picture uploads over the cellular network. For example, cellular providers often charged upload fees when a device was roaming on a visiting network or during peak traffic periods.

The patent specification expressly recognizes these two competing issues for camera-enabled cellular devices on cellular networks: limited local memory storage space for cell phones, on the one hand, and potential cellular network access fees for uploading pictures over cellular networks, on the other. For example, the '472 Patent describes at 14:32-41:

> "The aspect of the invention allowing for *automatic connection* to a LAN or the internet is also contemplated for use with *cell phone cameras*. *This aspect of the invention ameliorates the prior art storage space limitation which severely hampers the utility of the cell phone camera. Cellular service providers typically charge a fee for internet access* or emailing and so an automatic feature to connect to the net or send email for the purposes of transmitting pictures can improve revenue generation for these companies."

[4] On a motion for judgment on the pleadings for patent eligibility, this Court may consider the asserted claims, specification, and prosecution history of the patents-in-suit. *See CardioNet, LLC v. InfoBionic, Inc.,* 955 F.3d 1358, 1372-73 (Fed. Cir. 2020). In addition, the Court may take judicial notice of matters of public record. *Aatrix Software, Inc. v. Green Shades Software, Inc.*, 890 F.3d 1354, 1358 (2018)).

It is indisputable that the patent specification clearly identifies the competing problems: "the prior art storage space limitation which severely hampers the utility of the cell phone camera," but "cellular service providers typically charge a fee."

While additional revenue from picture uploads on cellular networks benefits service providers, it is a downside for devices that upload. In short, uploading pictures from the local memory to a remote site was (and still is, given the file size of images) an important way to address the issue of limited storage space, but when a cell phone blindly uploads all pictures, it may cause exorbitant fees during peak hours or roaming periods.

The Asserted Patents describe and claim an inventive solution to this problem: automatically uploading stored pictures to an "internet picture hosting site" whenever certain specific predetermined conditions are met. One of those key conditions is that uploads should be limited to "periods of cheaper network access." For example, the '472 Patent describes at 12:27-31:

> "[T]he inventive camera system is equipped with software and hardware coupled to the camera controller allowing independent communication with a computer network for the primary purpose of communicating its pictures over the internet…. [T]he invention contemplates the use of wired LAN, cellular data networks, etc. as the interconnection technology (FIG. 3, element 46 b) used by the inventive camera system."

The '472 Patent continues at 12:62-13:1:

> "In an enhancement to the above-disclosed embodiments of this aspect of the invention, the inventive camera system is operable for being instructed to automatically initiate a connection to the internet, LAN, printer, etc. whenever the predetermined conditions are met and it is in range of the network connection...

The specification further describes the solution at 13:3-7 by linking it to the access fees charged on cellular networks:

> Additionally, the inventive camera system is preferably operable so that the

> automatic connection is made only at certain times of the day or weekends, etc., so as to *confine picture transmission* to periods of low network usage or *periods of cheaper network access*, etc ....

In the same paragraph at 13:22-30, the specification also ties that improvement specifically to the other problem - limited local storage:

> "[T]he inventive camera system can be instructed to automatically send the pictures to an email account, internet picture hosting site, web-based photo printing site, the user's internet- connected home computer (when he is on vacation, for instance), etc. In this way, valuable pictures are *immediately* backed-up and the need for reliance on expensive *camera storage media* like flash cards, SD, etc. is greatly reduced."

The specification at 16:58-63 also describes using the status of cellular equipment to monitor the conditions in a manner useful for uploads:

> "[A]utomatically connecting to the internet when a set of predetermined rules or conditions (such as time, date, *status of equipment*, etc) is met would be useful for the download/upload of information from/to the internet, like music, video, etc. for processing, storage, transmission to another party, etc."

Consistent with the disclosure, each asserted independent claim recites a technological solution to the above-described problems (for brevity, the claims are recited only in part below):

'472 Patent Claim 1 (emphasis added):

A camera system comprising:

* * *

(f) a controller coupled to the cellular interface, the non-volatile local memory and the touch sensitive display, and configured to:

(i) receive, via the touch sensitive display, a user selection of an upload option that instructs the camera system to confine automatic picture upload to periods without potentially increased cellular network access fees;

(ii) *automatically connect to a picture hosting service that is internet-based and enable an upload* to the picture hosting service, over the internet and *via the cellular interface*, of a group of image sensor-captured pictures stored in the local memory, *during any period detected by the controller in which all three of the following conditions are met*:

(1) the upload is allowed because the system is *within one of the periods without potentially increased cellular network access fees, as determined*

using data from the cellular interface,

(2) the system is connected to the internet via the cellular interface; and

(3) at least one image sensor-captured picture stored in the local memory has been designated through the touch sensitive display as part of the group of pictures to be uploaded to the picture hosting service.

'472 Patent Claim 5 (emphasis added):

A camera system comprising:

* * *

(f) a controller coupled to the cellular interface, the non-volatile local memory and the touch sensitive display, and configured to:...

(ii) *automatically connect to a picture hosting service that is internet-based and enable an upload* to the picture hosting service, over the internet and *via the cellular interface*, of a group of image sensor-captured pictures stored in the local memory, *during any period detected by the controller in which all the following conditions are met*:

(1) the controller has received from the display a selection of the user-selectable input that instructs the camera system to *confine automatic picture uploads to periods without potentially increased cellular network access fees*;

(2) the controller *has confirmed that the camera system is within a period without potentially increased cellular network access fees*, *as determined using data from the cellular interface*;

(3) the system has a connection to the internet *via the cellular interface*; and

(4) at least one image sensor-captured picture stored in the local memory has been designated through the touch sensitive display as part of the group of image sensor-captured pictures to be uploaded to the picture hosting service.

'761 Patent Claim 1 (emphasis added):

A camera system comprising:

* * *

(f) a controller configured to:

(i) receive, via the touch sensitive display, a user selection of an upload option that instructs the device to confine automatic picture upload to periods without potential cellular network access fees;

(ii) *automatically* connect to a remote picture hosting service and cause an upload of one or more pictures stored in the non-volatile memory to the remote picture hosting service *via the cellular interface, after receiving*:

> (1) *data from the cellular interface used by the controller to determine that the upload is allowed based on the selected upload option*,
>
> (2) an indication that the system is connected to the internet via the cellular interface; and
>
> (3) an indication from the local memory that a user has elected an option to designate at least one picture from the group of pictures stored in the local memory to be uploaded to the remote picture hosting service.

In each claim, the device is configured to automatically upload pictures at any time several specific and technological conditions are met, including that the controller must determine that the camera system is within a period without potentially increased cellular network access fees (or without potential cellular network access fees) using data from the cellular interface.

The prosecution histories of CEV's patents confirm that the solution recited in the claims was (1) technological, (2) specific, and (3) unconventional at the time of the invention as compared to existing upload systems. Importantly, repeatedly during prosecution, CEV explained (among other distinctions) that existing methods for avoiding cellular network fees involved processes *local* to the device (such as timer-based uploads and uploads using calculated estimates), rather than using current cellular network data received via the cellular interface.

First, on October 25, 2019, with its initial filing of the application and claims that issued as the '472 Patent, CEV submitted an Information Disclosure Statement ("the 10/25/2019 IDS"). '472 F.H. at CEV-0011561-576. CEV stated ('472 F.H. at CEV-0011568):[5]

> Applicant's claims clearly distinguish timer based uploads where the user picks a time for the system to upload pictures, and the system uploads pictures at that set, selected time, as purportedly described in Colby, Kusaka 1, and Kawaoka,. *See, e.g.*, Colby at [0046] (stating "Other embodiments include modes wherein images are transmitted… ***at a specific time of day***"); Kusaka 1 at [0432] and [0478] (describing that "[t]he CPU 50 stores in memory the selected time block, engages

[5] The references addressed in the passages cited below are U.S. Pub. 2003/0030731 to Colby, No. 2004/0145660 to Kusaka et al., and No. 2002/0051074 to Kawaoka. These are of course just a few of the many references CEV distinguished during prosecution, but they are sufficient in the Rule 12(c) context to show the specific and unconventional nature of the CEV's Claims, and to debunk TCL's assertion that the claims are not "inventive."

> a means for time count such as the timer 74 to count the time and automatically executes the transmission of the specified image information to the outside by ***detecting that the current time point has entered a selected time block*****"**); and Kawaoka at [0100] (stating "[t]he transmission allowance conditions-judging unit 170 ***obtains time from the timer 86 through the time-obtaining section 160***. Then, the transmission allowance conditions-judging unit 170 judges whether or not to transmit images ***based on the obtained time***.").

Second, CEV explained in the 10/25/2019 IDS ('472 F.H. at CEV-0011569, emphasis added):

> As an alternative to the timer based uploads, Kawaoka also purportedly describes calculating the upload cost based on the file size or the amount of time the upload is expected to take and previously stored cost per minute estimates. The system determines whether to upload based on that internal calculation. Again, this more ***conventional*** method does not use current data from the cellular interface to determine whether or not the device is currently in a period of potentially increased cellular network access fees - the system has a stored cost parameter and makes basic calculations based on it....

Third, the 10/25/2019 IDS also summarized inventive aspects of the '472 Patent claims ('472 F.H. at CEV-0011567):

> "None of the references of record discloses or suggests 'an upload option that instructs the camera system to confine automatic picture upload to periods without potentially increased cellular network access fees.' Furthermore, none of the references describes, as a condition for upload, that the controller determines 'the upload is allowed because the system is within one of the periods without potentially increased cellular network access fees, as determined using data from the cellular interface' and that the controller automatically enables upload of designated photos to the picture hosting service when this condition and the other conditions are met. Thus, all of the pending claims are in condition for allowance for at least the same reasons that the Examiner recently issued the claims of the '116 and'761 patents in this family.
>
> The automatic upload recited in each of the independent claims is also conditioned upon pictures being designated – the controller is configured to enable upload of the designated group of pictures if pictures are designated and the other conditions are met. This feature of the claims further distinguishes systems that only provide for uploading all stored pictures, as well as systems that upload each and every picture immediately in response to the picture being taken."

Fourth, as yet another example, in a March 11, 2020 IDS, CEV pointed out that the claims distinguish other systems that altogether avoid the cellular network ('472 F.H. at CEV-0011172):

> "Ma … teaches to avoid altogether the cellular network because of fees and other

> purported complications associated with cellular uploading. *See e.g.*, Ma at [0056] (stating "[t]he invention obviates the use of a cellular phone system to upload photos….Cellular telephone services, used by mobile phones, also require complex telecommunication protocols including dialing up the system, transmitting cellular phone signals and other processes that take time, resources, cost money in air time and fees, and are generally cumbersome for a user who simply wants to upload photograph information…."). Thus, the device in Ma uses an internet-connected Kiosk to upload instead of the cellular network. *See e.g.*, Ma at [0024]."

Fifth, CEV filed a preliminary amendment the same day as the 10/25/2019 IDS presenting the claims that issued in the '472 Patent, and stated:

> "Applicant has also taken care to prepare the claims in compliance with 35 U.S.C. § 101 requiring claims to be directed to specific patentable subject matter. Applicant requests that the Examiner inform Applicant if he believes any claim is directed to any unpatentable subject matter so that appropriate amendments can be made."

'472 F.H. at CEV-0015419. The examiner did not issue a § 101 rejection in the '472 Patent.

Sixth, on December 7, 2017, CEV yet again distinguished earlier "timer-based" uploads in an examiner interview related to CEV's '116 Patent with parallel claim elements (examined by the same examiner in parallel with the asserted '761 Patent). In discussing the claim language pertinent to the '761 Patent, CEV stated in its interview summary (dated December 11, 2017):

> "The Examiner asked whether the current claims are patentable over Colby (Pub. No. 2003/0030731), which purportedly allows a user to "designate a time of day" for picture uploads. Applicant distinguished the present claims from a "timer." Specifically, Applicant used the hypothetical example of an egg timer vs. a device that determines when an egg is actually finished. In a timer scenario, cook time is set – and the device will stop cooking the egg at a designated time, regardless of whether the egg is "done." On the other hand, a device that actually determines whether an egg is "done" monitors the specific conditions of the egg and only stops cooking it when the conditions are right. Applicant's invention is comparable to the latter example and offers many explicit benefits over a simple timer. For example, a simple timer for picture upload (i.e., setting the upload for 8 PM) would still result in charges to a user's account if the user is "roaming" at the designated time that the upload begins. In short, a timer does not adequately prevent roaming or other network charges that can be incurred during photo uploads. Applicant also pointed out that the Colby reference fails to disclose or suggest the claims for many other reasons, and urged the Examiner to review the claims as a whole in determining their patentability."

’116 F.H. at CEV-0031291.

After considering the above in each respective file history, the examiner agreed with CEV and allowed the ’116, ’761, and ’472 patents. ’472 F.H. at CEV-0001850-851, ’116 F.H. at 0031251-255, ’761 F.H. at CEV 0030604-608.

Thus, the file histories of CEV’s patents unambiguously establish that: (1) automatically uploading pictures from a cellular device “ameliorates the prior art storage space limitation which severely hampers the utility of the cell phone camera,” but potential cellular network access fees or potentially increased cellular network access fees were a part of cellular networks, (2) other systems for automatic picture-uploads that were designed to minimize upload fees existed at the time of the invention, but had their own deficiencies, (3) CEV’s claims define a specific, unique, and unconventional (i.e. inventive) system for automatically uploading pictures that distinguished the prior art, and (4) the examiner agreed with CEV and allowed the claims.

Importantly, in Rule 12(c) context, all of the facts set forth above from the public record must be accepted as true and must be considered in the light most favorable to CEV. *Hughes v. The Tobacco Inst., Inc.*, 278 F.3d 417, 420 (5th Cir. 2001). As demonstrated below, those facts warrant denial of TCL’s motion.

III. Argument

A. CEV’s Claims are Not Directed to an Abstract Idea Under Alice Step One

Under Alice Step 1, a claim is directed to eligible subject matter if (1) the focus of the claimed advance is on a solution to a problem specifically arising in the realm of computer networks or computers, and (2) the claim is properly characterized as identifying a “specific” improvement in computer capabilities or network functionality, rather than only claiming a desirable result or function. *TecSec, Inc. v. Adobe Inc.*, 978 F.3d 1278, 1293 (Fed. Cir. 2020)

(numerous citations omitted). "Even what seem like small technical details could loom large in the final eligibility analysis because there is often only a very thin line between a patent that is directed at an abstract idea and a patent that is directed to improving, for example, a computer . . . system." *AML IP, LLC v. J.C. Penney Corp. Inc.*, 6:21-cv-522-ADA, 2022 U.S. Dist. LEXIS 189697, at *13 (W.D. Tex. Oct. 18, 2022); citing *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1336 (Fed. Cir. 2016).

As shown above in Section II, CEV's Claims recite a specific improvement and not an abstract solution to the technological problem with camera-enabled cellular devices. The claims are not directed to applying a human activity to computers: to the contrary, limited storage space is a camera-cell phone problem that remote picture storage has been used to address, as are the associated potential cellular network fees to access those remote-storage locations.

TCL's mischaracterizes CEV's claims as being directed to either "automatically uploading chosen pictures when certain conditions are met" or "automatically uploading chosen pictures when certain conditions are met, such as only during periods without 'potential cellular network access fees' or 'potentially increased cellular network access fees.'"[6] However, TCL's erroneous analysis conveniently leaves out any mention that CEV's claims require automatic picture uploads that occur when a *specific* set of defined *technological* conditions is met.

Specifically, the claimed device determines whether it is in an appropriate period for upload *using data from the cellular interface*, as compared to systems that CEV distinguished during prosecution (e.g., using a timer, or a calculated estimate, or any number of other technological methods known at the time of the invention). The prosecution history (summarized

[6] TCL goes even further when it overgeneralizes CEV's claim, detached from virtually all of the elements of the claim, as "akin to saying, 'I want to send pictures when it's not going to cost me anything or when it's not going to cost me a lot of money.'" *See* TCL Memo at p. 4.

in Section II) establishes that the claims recite a specific way to determine whether to automatically upload pictures based on conditions that distinguished all the prior art of record, rather than just a result. *See, e.g.*, *Finjan, Inc. v. Blue Coat Sys.,* 879 F.3d 1299, 1305 (Fed. Cir. 2018) ("Here, the claims recite more than a mere result. Instead, they recite specific steps—generating a security profile that identifies suspicious code and linking it to a downloadable—that accomplish the desired result.").

CEV's Claims are analogous to the claims in *Core Wireless Licensing S.A.R.L. v. LG Elecs., Inc.*, 880 F.3d 1356 (Fed. Cir. 2018) and are patentable for the same reasons. First, the Federal Circuit found that the *Core Wireless* claims "disclose an improved user interface for electronic devices, *particularly those with small screens*." 880 F.3d at 1363. Similarly, CEV's claims are directed to an improved method of automatically uploading in cellular devices with *limited memory* that operate on cellular networks with upload-related fees. *See* Section II.

Second, *Core Wireless* found,

> "Although the generic idea of summarizing information certainly existed prior to the invention, these claims are directed to a *particular manner* of summarizing and presenting information in electronic device" because the claim "requires 'an application summary that can be reached directly from the menu,' specifying a *particular manner* by which the summary window must be accessed."

880 F.3d at 1362. Similarly, CEV's Claims are directed to a *particular manner* of uploading on the cellular network while avoiding potential fees, not just the abstract idea of "uploading when cheap." The claims describe automatically uploading when several specific conditions are met.

Third, *Core Wireless* found that the claimed "summary window 'is displayed while the one or more applications are in an unlaunched state,' a requirement that the device applications *exist in a particular state*." *Id.* at 1363. It concluded that "these claims recite a *specific improvement over prior systems*, resulting in an improved user interface for electronic devices." *Id.* Similarly,

in CEV's Claims, the controller must confirm that the cellular network is in a *particular state* using a specific form of data *from the cellular network*. The controller in the claims uses "data from the cellular interface" to "confirm[] that the camera system is within a period without potentially increased cellular network access fees." The prosecution history establishes that at least this condition in combination with the others (that provide further particularity) is a "specific improvement over prior art systems." CEV distinguished on the record many other systems that attempted to upload pictures during cheaper periods: timers, calculated estimates, and systems that avoided cellular networks. *See* Section II above.

The Federal Circuit's decision in *TecSec, Inc. v. Adobe Inc.*, 978 F.3d 1278 (Fed. Cir. 2020) is also on point. In *TecSec*, the defendant argued that "the claims are directed to the impermissibly abstract idea of managing access to objects using multiple levels of encryption." 978 F.3d at 1294. The Court disagreed, stating:

> [C]laim 1 …goes beyond managing access to objects using multiple levels of encryption, as required by 'multilevel . . . security.' Notably, it expressly requires, as well, accessing an 'object oriented key manager' and *specified uses* of a 'label' as well as encryption for the access management…..To disregard those express claim elements is to proceed at 'a high level of abstraction' that is 'untethered from the claim language' and that 'overgeneraliz[es] the claim.'"

Id. at 1295. The Court found: "The patent focuses on allowing for the simultaneous transmission of secure information to a large group of recipients connected to a decentralized network—an important feature of data networks—but without uniform access to all data by all recipients . . . . The proposed improvement involves, among other things, *labeling* together with *encryption*." *Id*.

Importantly, *TecSec* reached its conclusion without finding either "labeling" or "encryption" individually novel. Rather, the *specific use* of labeling *with* encryption, to solve the problem, was enough. Similarly, CEV's prosecution history here established that using data from the network interface to determine whether the upload is allowed as a condition for automatic

upload, in combination with the other conditions, is a specific *use* of the cellular interface data that results in an improvement to camera-enabled cellular devices. *See* Section II. TCL cannot contest these ***facts*** set forth in the prosecution history in a motion for judgment on the pleadings.

Unlike *Core Wireless* and *TecSec*, the cases that TCL relies on in its brief do not apply:

- *Yanbin Yu v. Apple Inc.,* 1 F.4th 1040 (Fed. Cir. 2021) does not stand for the proposition that every claim reciting camera hardware is abstract. In *Yu*, the Federal Circuit noted that "the idea and practice of using multiple pictures to enhance each other has been known by photographers for over a century." 1 F.4th at 1043. Further, the solution recited in the claims was to *generically* "take one image and '*enhance*' it with another." *Id.* at 1044.
- The claims in *In re TLI Communications Patent Litigatio*n, 823 F.3d 607, 610 (Fed. Cir. 2016) recited "storing the digital images in the server, said step of storing *taking into consideration the classification information*." Again, humans classified images long before computers. Further, the claimed server in *TLI* broadly, in a non-specific way, was "taking into consideration" received classification information. Nothing in the claim provided a specific or unconventional form of classification, so the claim did not reflect an "inventive solution to any problem." *Id.* at 612.
- In *Affinity Labs of Texas, LLC v. Amazon.com Inc.*, 838 F.3d 1266, 1269, 1271 (Fed. Cir. 2016), the claim did not "provid[e] any limiting detail that confines the claim to a particular solution to an identified problem" and was "not limited to any *particular form* of customization, but covers the *general idea* of customizing a user interface."
- In *USC IP Partnership, L.P. v. Facebook, Inc*., 576 F. Supp. 3d 446, 455 (W.D. Tex. 2021), this Court found that those claims "do not solve an Internet-specific problem with an Internet-specific solution" because "finding *information that matches the user's intent* —

is a longstanding problem that existed long before the advent of computers and is not unique to the Internet." The Court further found that the claim contained "no explanation of *how* 'processing' steps are performed or *how it causes the intent engine to determine* an 'inferred intent' or 'at least one recommended webpage.'" *Id.* at 456.

In contrast, CEV's claims are not addressed to "century" old practices of humans: the conflict between limited memory space and cellular upload costs is a problem specific to camera-enabled cellular devices on cellular networks. CEV's claims recite specific, technological conditions, including using data from the cellular interface to determine whether the upload is allowed, providing a user option on the touchscreen to turn the feature on, and receiving a selection of at least one of the pictures to be uploaded. CEV's claims describe exactly *how* the automatic uploads are carried out, and exactly *how* the determination of whether to upload is made. They are not abstract.

Importantly, the prosecution history establishes that CEV's claims recite specific and limiting details confining the claims to a particular solution that was found to be inventive and that distinguished other prior art solutions. *See* Section II; *see also, e.g.*, *Data Engine Techs. LLC v. Google LLC*, 906 F.3d 999 (Fed. Cir. 2018) (distinguishing *Affinity Labs* because the claim recited "a *particular manner* of navigating three-dimensional spreadsheets, implementing an improvement in electronic spreadsheet functionality.") In particular, the examiner agreed with CEV that using data from the cellular interface to determine whether it is an appropriate period for the upload was specific and inventive, a finding that cannot be rebutted in a motion for judgment on the pleadings. CEV's claims do *not* generically say "send pictures when it's not going to cost me anything or when it's not going to cost me a lot of money." TCL misconstrues CEV's claims to try to shoe-horn them into its limited case-law.

In sum, as confirmed by the prosecution history, the claims are directed to an inventive and specific system for solving a technological problem described in the specification, and those facts in the specification and prosecution history must be taken as true for purposes of TCL's motion. TCL's motion for judgment on the pleadings should be denied at Alice Step 1.

B. CEV's Claims Recite an Inventive Concept Under Alice Step Two

Regardless of any other aspect of TCL's § 101 arguments, the facts set forth in the prosecution history of CEV's patents—which must be accepted as true and viewed favorably to CEV in the Rule 12(c) context—require a conclusion that TCL failed to prove by clear and convincing evidence that CEV's claims are ineligible under Alice Step 2. The prosecution histories are replete with evidence that CEV's claims recite an unconventional implementation of automatically uploading pictures that is significantly more than any alleged abstract idea, and in addition, contrary to TCL's repeated assertions, the claims define an inventive concept that distinguished the prior art. *See* Section II above.

For Alice Step 2, TCL asserts that the "claims of the patents-in-suit do not recite any improved computer, hardware component, picture format, data structure, communication protocol, or any other improvement to computer technology" and that "they recite using well-known and conventional hardware components (e.g., 'camera,' 'lens,' 'sensor,' 'memory,' 'touch sensitive display,' and 'cellular interface') to perform 'well-understood, routine, conventional activities previously known in the industry.'" TCL Brief at p. 12 (citations omitted).

As a first point, TCL's focus on "conventional hardware components" is irrelevant, because "[t]he inventive concept inquiry requires more than recognizing that each claim element, by itself, was known in the art," and "[a]n inventive concept can be found in the non-conventional and non-generic arrangement of known, conventional pieces." *BASCOM Global Internet Servs. V.*

AT&T Mobility LLC, 827 F.3d 1341, 1350 (Fed Cir. 2016).

Also, "[t]he question of whether a claim element or combination of elements is well-understood, routine and conventional to a skilled artisan in the relevant field *is a question of fact*" that "must be proven by clear and convincing evidence." *Berkheimer v. HP Inc.*, 881 F.3d 1360, 1368 (Fed. Cir. 2018), *citing Microsoft Corp. v. i4i Ltd. P'ship*, 564 U.S. 91, 95 (2011). TCL's unsupported attorney argument concerning what *its counsel* regards as an "improvement to computer technology" cannot establish *any* fact at all.

Moreover, for purposes of TCL's 12(c) motion, the question is whether any facts, accepted as true and viewed favorably to CEV, exist in the record to support that the claims recite an inventive concept. Those facts *undoubtedly* exist: the prosecution history shows that CEV's claims recite an unconventional, inventive concept that distinguished prior upload systems.[7] At best, if TCL had evidence to support its attorney argument (which it does not provide), TCL might try to dispute the facts in the prosecution history with alternate facts. However, that would lead to the same outcome: a genuine issue of material fact exists that precludes TCL's Rule 12(c) motion.

TCL undoubtedly cannot meet its heavy burden to clearly and convincingly prove, as a matter of law, both that each individual element *and* the combination of elements recited in CEV's claims was merely well-understood, routine, and conventional to a skilled artisan in a way that precludes a finding that the claims recite an inventive concept.

Referring to claim 5 of the '472 patent as an example, the claim recites as one automatic upload condition:

> "the controller *has confirmed that the camera system is within a period without potentially increased cellular network access fees*, *as determined using data from*

[7] *See* Section II. As further proof of an inventive concept, the prosecution histories describe many upload systems for minimizing cellular network fees that the claims do not preempt, such as timer-based uploads, calculated estimates, and kiosks. *BASCOM*, 827 F.3d at 1350 (claims found eligible did not "preempt all ways of filtering content on the Internet.").

the cellular interface."

CEV's statements during prosecution are unequivocal and led to allowance.

CEV explained in its IDS submitted with the claim that, using "*current data from the cellular interface* to determine whether or not the device is currently in a period of potentially increased cellular network access fees," as recited in this claim element "clearly distinguish[e]s timer based uploads where the user picks a time for the system to upload pictures, and the system uploads pictures at that set, selected time, as purportedly described in Colby, Kusaka 1, and Kawaoka." '472 F.H. at CEV-0011568. CEV also explained that its claim distinguished the conventional method of "calculating the upload cost based on the file size or the amount of time the upload is expected to take and previously stored cost per minute estimates." *Id.* at CEV-0011569, After considering CEV's explanation of this unconventional, inventive concept and the references (among others), the examiner allowed the '472 patent claims. The '761 Patent claims issued under similar circumstances. *See* Section II above. That element (f) of each claim alone is enough to demonstrate an inventive concept.

In addition, the prosecution history describes that other claim elements also contribute to the inventive concept. Claim 5 of the '472 patent also recites another upload condition:

> "the controller has received from the display a selection of the user-selectable input that instructs the camera system to *confine automatic picture uploads to periods without potentially increased cellular network access fees*."

CEV explained to the examiner that "[n]one of the references of record discloses or suggests" this element. *See* Section II. Claim 5 of the '472 patent also recites:

> "at least one image sensor-captured picture stored in the local memory has been designated through the touch sensitive display as part of the group of image sensor-captured pictures to be uploaded to the picture hosting service."

As CEV explained, "This feature of the claims further distinguishes systems that only provide for

uploading all stored pictures, as well as systems that upload each and every picture immediately in response to the picture being taken." *See* Section II above.

The above descriptions of the claim elements in the prosecution history, and subsequent allowance of the '472 patent, are *prima facie* evidence that the claims recite an inventive concept. The '761 Patent has similar claim elements and prosecution history. *See* Section II above.

Finally, CEV licensed its patents to eleven of the world's leading mobile-phone manufacturers that aggressively defend and assert patents and that adopted the inventive technology recited in CEV's claims, including (1) Samsung; (2) LG; (3) Sony; (4) Microsoft; (5) ZTE; (6) OnePlus; (7) Kyocera; (8) HTC; (9) ASUS; (10) BLU; and (11) Sonim. First Amended Complaint (Dkt. # 55), ¶¶ 1, 22, 23.

All of the above establishes that CEV's Claims recite an Alice Step 2 inventive concept, and TCL's motion must be denied.

IV. Conclusion

CEV's patents are presumptively valid, and this Court has already ordered that they are not purely functional or indefinite. *See Microsoft Corp. v. i4i Ltd. P'ship*, 564 U.S. 91, 97, (2011); *Commil USA, LLC v. Cisco Systems, Inc.*, 575 U.S. 632, 643-44 (2015). TCL cannot shirk its duty to prove invalidity by clear and convincing evidence. CEV respectfully requests that this Court deny TCL's Rule 12(c) motion to dismiss.

In the alternative, to the extent Court concludes additional facts should be pled, CEV seeks leave to amend its complaint incorporate material from the specification and prosecution history addressed in this brief and set forth CEV's accompanying "Statement of Material Facts from the Public Record."

Respectfully submitted on April 27, 2023, by:

/s/ Justin Lesko

Justin J. Lesko
IL Bar No. 6306428
Admitted Pro Hac Vice
Law Offices of Lisa & Lesko, LLC
55 East Monroe Street, Suite 3800
Chicago, IL 60603
Tel.: (774) 484-3285
JustinLesko@patentit.com

Steven G. Lisa
IL Bar No. 6187348
Admitted Pro Hac Vice
Law Offices of Lisa & Lesko, LLC
55 East Monroe Street, Suite 3800
Chicago, IL 60603
Tel.: (480) 442-0297
SteveLisa@patentit.com

Eamon Kelly
IL Bar No. 6296907
Admitted Pro Hac Vice
SPERLING & SLATER, LLC
55 West Monroe Street, 32nd Floor
Chicago, IL 60603
Tel.: (312) 641-3200
Fax: (312) 641-6492
ekelly@sperling-law.com

Lead Counsel for Plaintiff

David N. Deaconson
Texas Card Bar #05673400
PAKIS, GIOTES, PAGE & BURLESON, P.C.
P.O. Box 58
Waco, TX 76703-0058
(254) 297-7300 Phone
(254) 297-7301 Facsimile
deaconson@pakislaw.com

Local Counsel for Plaintiff

CERTIFICATE OF SERVICE

A true and correct copy of the foregoing instrument was served or delivered electronically via U.S. District Court [LIVE]- Document Filing System, to all counsel of record, on this the 27th day of April 2023.

/s/ Justin Lesko
Justin Lesko